

REMARKS

Claims 1-25 were pending in the Application. Claim 1 is an independent claim and claims 2-16 depend there from. Claim 17 is an independent claim and claims 18-23 depend there from. Claim 24 and 25 are independent claims. Applicant respectfully requests reconsideration of the application in light of the following remarks.

Specification Objection

On Page 2 of the non-final Office Action, the specification was objected to because “[t]he title of the invention is not descriptive enough.” Specifically, the non-final Office Action stated that “[a] new title is required that is clearly indicative of the invention (specifically indicating what is meant by one-shot) to which the claims are directed.” (Office Action, Page 2). The Applicant respectfully traverses the objection, however, in order to advance prosecution in the application, the Applicant has amended the title to recite “A SYSTEM AND METHOD FOR TRANSFERRING DATA OVER A REMOTE DIRECT MEMORY ACCESS (RDMA) NETWORK.” Therefore, because the new title is clearly indicative of the invention, the Applicants respectfully request that the objection to the specification be withdrawn.

Rejections Under 35 U.S.C. §102(e) - Tillier

Claims 1-5, 10, 16-18, 20, 22 and 23 were rejected under 35 U.S.C. §102(e) as being anticipated by Tillier. (U.S. Patent No. 6,421,742). The Applicant respectfully traverses the rejections for at least the following reasons.

With regard to the anticipation rejections, MPEP 2131 states, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814

F.2d 628, 631 2 USPQ2d 1051, 1053 (Fed.Cir. 1987). MPEP 2131 also states, “[t]he identical invention must be shown in as complete detail as is contained in the … claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Regarding claims 1 and 17, the Applicants respectfully submit that Tillier fails to teach, suggest, or disclose, for example, “wherein the driver and the NIC perform a one-shot initiation process of an RDMA operation,” as set forth in independent claim 1; and “wherein the driver and the NIC perform a one-shot completion process of an RDMA operation,” as set forth in independent claim 17.

Tillier is different than Applicant’s independent claims 1 and 17 because Tillier discloses “a method of transferring data to or from an input/output unit **across a network** emulates a message passing protocol. **A message sent from a host device to the input/output unit** specifies the requested data transfer and is formatted in accordance with the message passing protocol.” (Tillier, Abstract). Tillier fails to disclose “the driver and the NIC [of a host] perform a one-shot initiation [or completion] process of an RDMA operation,” as set forth in Applicant’s independent claims 1 and 17. Rather, Tillier discloses messages sent between a host and another device over a network.

Page 3 of the Office Action states that Tillier teaches “wherein the driver and the NIC perform a one-shot initiation process of an RDMA operation (column 3, lines 55-61 that disclose as an example, how in a single message passed from a host, the I/O unit can read and store 1 megabyte of data in an address location of the host memory, without having to interrupt the host CPU multiple times).” However, the cited section of Tillier discloses “a message passed **from a host** could instruct the I/O unit....” (Tillier, Column 3, Line 56). Tillier fails to disclose “wherein the driver and the NIC [of a host] perform a one-shot initiation [or completion] process of an RDMA operation,” as set forth in Applicant’s independent claims 1 and 17. Because the Office Action has failed to show “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference” as required for an anticipation rejection under MPEP 2131, the rejections under 35 U.S.C. § 102(e) cannot be maintained.

Therefore, for at least the above stated reasons, Applicant respectfully submits that the Tillier reference fails to teach, suggest, or disclose Applicant's invention as set forth in claims 1 and 17. The Applicant believes that claims 1 and 17 are allowable over Tillier. Applicant respectfully submits that claims 1 and 17 are independent claims, and that claims 2-16 and 18-23 depend either directly or indirectly from independent claims 1 and 17, respectively. Because claims 2-16 and 18-23 depend from claims 1 and 17, respectively, Applicant respectfully submits that claims 2-16 and 18-23 are allowable over the Tillier reference, as well. The Applicant respectfully requests, therefore, that the rejection of claims 1-5, 10, 16-18, 20, 22 and 23 under U.S.C. §102(e), be withdrawn.

Rejections Under 35 U.S.C. §103(a) – Tillier in view of Roach

Claims 6-9, 11-15, 19, 24 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tillier in view of Roach et al. (U.S. Patent No. 6,421,742, hereinafter “Roach”). The Applicant respectfully traverses the rejection for at least the following reasons.

With regard to an obviousness rejection, MPEP 2142 states that in order for a *prima facie* case of obviousness to be established, three basic criteria must be met, one of which is that the reference or combination of references must teach or suggest all the claim limitations. Further, MPEP 2143.01 states that “the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination”, and that “although a prior art device ‘may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so’” (citing *In re Mills*, 916 F. 2d 680, 16 USPQ 2d 1430 (Fed Cir. 1990)). Moreover, MPEP 2143.01 also states that the level of ordinary skill in the art cannot be relied upon to provide the suggestion...,” citing *Al-Site Corp. v. VSI Int'l Inc.*, 174 F. 3d 1308, 50 USPQ 2d. 1161 (Fed Cir. 1999).

Regarding claims 24 and 25, Applicant respectfully submits that the proposed combination of references fails to teach, suggest, or disclose at least, for example, “initiating an RDMA write operation using a one-shot initiation process between a driver and a NIC,” as set forth in Applicant’s independent claim 24; and “completing an RDMA write operation using a one-shot completion process between a NIC and a driver of a host,” as set forth in Applicant’s independent claim 25.

The combination of Tillier and Roach is different than Applicant’s independent claims 24 and 25 at least because Roach fails to remedy the deficiencies of Tillier. Tillier discloses “a method of transferring data to or from an input/output unit **across a network** emulates a message passing protocol. **A message sent from a host device to the input/output unit** specifies the requested data transfer and is formatted in accordance with the message passing protocol.” (Tillier, Abstract). Roach discloses “[a] communication processor sends and receives frames of data and commands. Transmit and receive protocol engine is controlled by host driver software which utilizes predetermined bits to indicate which frame is the last frame in a series of frames. This information is then placed in the transmit frame before it is sent.” (Roach, Abstract). Tillier alone, Roach alone, and the combination of Tillier and Roach fail to disclose “initiating [completing] an RDMA write operation using a one-shot initiation [completion] process between a driver and a NIC,” as set forth in Applicant’s independent claims 24 and 25. Because the combination of references fails to teach or suggest all the claim limitations as required for an obviousness rejection under MPEP 2142, the rejections under 35 U.S.C. § 103(a) cannot be maintained. Therefore, for at least the reasons set forth above, Applicant respectfully requests that the rejection of claims 24 and 25 under 35 U.S.C. §103(a) be withdrawn.

Claims 6-9 and 11-15, and 19 depend, respectively, from independent claims 1 and 17. Applicant believes that claims 1 and 17 are allowable over the proposed combination of references, in that Roach fails to overcome the deficiencies of Tillier, for at least the reasons set forth above. Because claims 6-9 and 11-15, and 19 depend, respectively, from independent claims 1 and 17, Applicant respectfully submits that claims 6-9, 11-15 and 19 are allowable over the proposed combination of Tillier and Roach, as well. Therefore, for at least the reasons set

Appl. No. 10/643,331
Resp. to Office Action of June 27, 2007
Response dated Nov. 27, 2007

forth above, Applicant respectfully requests that the rejection of claims 6-9, 11-15 and 19 under 35 U.S.C. §103(a) be withdrawn.

Rejections Under 35 U.S.C. §103(a) – Tillier in view of Futral

Claim 21 was rejected under 35 U.S.C. §103(a) as being unpatentable over Tillier in view of Futral et al. (U.S. Patent No. 5,991,797, hereinafter “Futral”). The Applicant respectfully traverses the rejection for at least the following reasons. Claim 21 depends from independent claim 17. Applicant believes that claim 17 is allowable over the proposed combination of references, in that Futral fails to overcome the deficiencies of Tillier, for at least the reasons set forth above. Because claim 21 depends from independent claim 17, Applicant respectfully submits that claim 21 is allowable over the proposed combination of Tillier and Futral, as well. Therefore, for at least the reasons set forth above, Applicant respectfully requests that the rejection of claim 21 under 35 U.S.C. §103(a) be withdrawn.

Applicant reserves the right to argue additional reasons supporting the allowability of claims 1-25 should the need arise in the future.

Appl. No. 10/643,331
Resp. to Office Action of June 27, 2007
Response dated Nov. 27, 2007

CONCLUSION

Applicant respectfully submits that claims 1-25 are in condition for allowance, and requests that the application be passed to issue.

Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

Please charge any required fees not paid herewith or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Date: November 27, 2007

Respectfully submitted,

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